

CLAIMS

What is claimed is:

1. A core for use in a passive integrated transponder tag, said core extending substantially the entire length of said transponder tag and comprising a coil receiving portion and a electronics support portion.
2. The unitary core of claim 1, wherein said electronics support portion is adapted to support an integrated circuit.
3. The core of claim 1, wherein said electronics support portion further comprises a metalization layer formed therein or thereon.
4. The core of claim 1, wherein said electronics support portion further comprises on or more metal pads formed therein or thereon.
5. The core of claim 1, further comprising an antenna coil wound about said coil receiving portion and electronically connected to a metalization layer or a metal pad formed on or in said electronics support portion.
6. The core of claim 5, further comprising an integrated circuit electrically connected to said antenna coil.
7. The core of claim 6, wherein said integrated circuit and antenna coil are each electrically connected to said metalization layer or metal pad.
8. The core of claim 5, wherein said integrated circuit is of the flip-chip technology.
9. The core of claim 8, wherein said electronics support portion further comprises a surface mounted capacitor thereon.
10. The core of claim 1, wherein said core is made of ferrite.

11. The core of claim 1, further comprising an encapsulation means enclosing said core.